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TROP PRUNER & HU, PC			CHAMBLISS, ALONZO	
8554 KATY F	REEWAY			
SUITE 100			ART UNIT	PAPER NUMBER
HOUSTON, TX 77024		2814		

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/853,111

Filing Date: May 10, 2001

Appellant(s): SALMAN AKRAM

Salman Akram For Appellant

EXAMINER'S ANSWER

MAILED MAY 1 0 2005

GROUP 2800

This is in response to the appeal brief filed 6/10/04.

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(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 19may not be grouped and all of the other claims may be grouped with claim 15 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

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The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,646,829

Sota

7-1997

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(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 15-22, 32, 34, and 35 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Sota (U.S. 5,646,829).

With respect to claims 15, 21, and 32, Sota teaches stacking at least two semiconductor dies 1 having substantially the same rectangular dimensions on top of one another by die pad 2 such that one of the dies 1 is mounted on top of the lead frame fingers 3 and the other of the dies 1 is mounted on and in contact (i.e. by way of the die paddle) the die 1 mounted on the lead frame fingers 3 (see Figs. 3b - 3e). Each of the semiconductor dies 1 is wire bonding to the same lead frame fingers 3 (see Figs. 3c -3e).

With respect to Claims 16 and 34, Sota teaches wherein one of the semiconductor dies 1 is mounted back to back on the other of the semiconductor dies 1 (see Figs. 3c-3e).

With respect to Claims 17 and 35, Sota teaches wherein one of the semiconductor dies 1 is adhered to the other of semiconductor dies by an adhesive layer by die bonding agent made of polyimide resin that is heating to form adhesion with the semiconductor dies 1 (see col. 5 lines 5-35).

With respect to Claim 18, Sota teaches wherein a first semiconductor die

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has a lead-on-chip configuration (see Figs. 3b- 3e).

With respect to Claim 19, Sota teaches wherein one of the dies 1 is secured to the lead frame and the other of the dies is secured to the die 1 by die pad 2 so that the die is secured to the lead frame (see Figs. 3b - 3e).

With respect to Claim 20, Sota teaches wire bonding the semiconductor dies 1 to the lead frame, wherein the dies 1 have facing sides and outwardly facing sides by extending wire to bond pads on the outwardly facing sides of the dies 1 (see Figs. 3c- 3e).

With respect to Claim 22, Sota teaches encapsulating the semiconductor dies 1 and the lead frame in a single package body 7 (see Figs. 3d and 3e).

(11) Response to Argument

Appellant contends in claim 15 that Sota does not teach two dies " in contact " with one another. Sota teaches a top die 1 in contact (i.e. by way of the adhesive and die paddle or pad) with a bottom die 1 (see col. 5 lines 12-15 and 34-57; Figs. 3b-3e). The use of the word " contact " can be viewed as the top die in thermal contact with the bottom die, the top die is electrically in contact with the bottom die by bonding wires and leads, the top die is in contact with the bottom die by the resin 6, or as used in the Webster's Collegiate Dictionary, 10th Edition, defining contact as the union or junction of surfaces. Using the adhesive and die paddle or pad 2 or the resin 6 makes the union or junction of surfaces. Furthermore, the examiner never relies on Figures 1 and 2 to teach the elements in the claim. The examiner has relied upon Figs. 3c-3e. Also,

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applicant's Fig. 3 shows a top die in contact with a bottom die by way of adhesive and lead fingers. Therefore, Sota clearly teaches all of the elements of claim 15.

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Applicant contends in claim 19 that Sota fails to teach one of the dies to be secured to the lead frame and the other of the dies is secured to the die secured to the lead frame. Sota teaches one of the dies 1 to be secured to the lead frame and the other of the die by an adhesive and die paddle or pad so that the die secured to the lead frame (see Figs. 3b-3e). Furthermore, the claims and the drawings show an intervening element to attach one die to another die. Sato discloses the intervening element as adhesive/die paddle or pad and an insulating resin to secure the two dies together. Thus, allowing the two dies to be secured even though they are on opposite sides of the lead frame.

For the above reason, it is believed that the rejection should be sustained.

AC/April 29, 2005

Alonzo Chambliss

Primary Patent Examiner

Art Unit 2814

Conferees

Wael Fahmy, SPE W.

Olik Chaudhuri, SPE QC.

TROP PRUNER & HU, PC 8554 KATY FREEWAY SUITE 100 HOUSTON TX 77024